Application No. 10/766,861

In the claims:

- 1. (original) An ingestible device, comprising:
- (a) a sink mechanism for generating an net influx of at least one constituent-of-interest present in a gastrointestinal tract of an individual; and
- (b) a confining mechanism for confining said sink mechanism in a predetermined confinement, hence directing said net influx is into said confinement.
- 2. (original) The device of claim 1, wherein said net influx generated by said sink mechanism is substantially higher than a net influx generated by a concentration difference of said at least one constituent-of-interest devoid of said sink mechanism, said concentration difference being the difference between concentrations of said at least one constituent-of-interest in and out of said predetermined confinement.
- 3. (original) The device of claim 1, wherein said sink mechanism is selected from the group consisting of a sink material and a sink device.
- 4. (original) The device of claim 3, wherein said sink material is for absorbing said at least one constituent-of-interest.
- 5. (original) The device of claim 4, wherein said sink material is selected from the group consisting of a high affinity sink material, a low affinity sink material and a combination of a high affinity sink material and a low affinity sink material.
- 6. (original) The device of claim 5, wherein said high affinity sink material is selected from the group consisting of an antibody, whereby said constituent-of-interest is an antigen, a receptor whereby said constituent-of-interest is a ligand, a ligand whereby said constituent-of-interest is an inhibitor, an inhibitor whereby said constituent-of-interest is an enzyme and a lectin whereby said constituent-of-interest is a saccharide.
- 7. (original) The device of claim 5, wherein said low affinity sink material is selected from the group consisting of a nutritional fiber, a clay and a resin.
- 8. (original) The device of claim 3, wherein at least a portion of said sink material is attached to a solid phase.
- 9. (original) The device of claim 3, wherein said sink material is water soluble.
- 10. (original) The device of claim 3, wherein said sink material is water non-soluble.
- 11. (original) The device of claim 3, wherein said sink material comprises beads.
- 12. (original) The device of claim 3, wherein said sink material comprises a polymer.
- 13. (original) The device of claim 3, wherein said sink material comprises an inert solid phase to which affinity sink molecules are attached.

- 14. (original) The device of claim 3, wherein said sink material is for converting said at least one constituent-of-interest.
- 15. (original) The device of claim 14, wherein said converting said at least one constituent-of-interest comprises an anabolic process.
- 16. (original) The device of claim 14, wherein said converting said at least one constituent-of-interest comprises a catabolic process.
- 17. (original) The device of claim 14, wherein said sink material is a catalyst.
- 18. (original) The device of claim 14, wherein said catalyst is water soluble.
- 19. (original) The device of claim 14, wherein said catalyst is attached to a solid phase.
- 20. (original) The device of claim 17, wherein said catalyst is an anabolic catalyst for accelerating an anabolic process of said constituent-of-interest in said predetermined confinement.
- 21. (original) The device of claim 20, wherein said anabolic process involves at least two constituents of said gastrointestinal tract.
- 22. (original) The device of claim 20, further comprising a substance participating in said anabolic process.
- 23. (original) The device of claim 17, wherein said catalyst is a catabolic catalyst for accelerating a catabolic process of said constituent-of-interest in said predetermined confinement.
- 24. (original) The device of claim 23, wherein said catabolic catalyst is selected from the group consisting of an esterase, a peptidase, a lipase, a saccharidase, a DNAse and an RNAse.
- 25. (original) The device of claim 17, wherein said catalyst is selected from the group consisting of an enzyme and a chemical catalyst.
- 26. (original) The device of claim 14, wherein said sink material comprises an oxidant for oxidizing said constituent-of-interest.
- 27. (original) The device of claim 14, wherein said sink device comprises a reductant for reducing said constituent-of-interest.
- 28. (original) The device of claim 14, wherein said sink material is a living organism.
- 29. (original) The device of claim 28, wherein said living organism is selected from the group consisting of a bacterium, a unicellular parasite, a multicellular parasite and a fungus.
- 30. (original) The device of claim 29, wherein said fungus is a yeast.
- 31. (original) The device of claim 28, further comprising a selective membrane for allowing a preferred influx of said at least one constituent-of-interest.

- 32. (original) The device of claim 3, wherein said sink device is for converting said at least one constituent-of-interest.
- 33. (original) The device of claim 32, wherein said conversion of said at least one constituent-of-interest is selected from the group consisting of chemical conversion, mechanical conversion and electrical conversion of said at least one constituent-of-interest.
- 34. (original) The device of claim 32, wherein said sink device is an electrical sink device.
- 35. (original) The device of claim 32, further comprising a power source.
- 36. (original) The device of claim 32, wherein said sink device comprises an oxidation-reduction system.
- 37. (original) The device of claim 36, wherein said oxidation-reduction system comprises electrodes and a power source.
- 38. (original) The device of claim 32, further comprising a selective membrane for allowing preferred influx of said at least one constituent-of-interest.
- 39. (original) The device of claim 1, further comprising a mixing mechanism for actively mixing a content of said predetermined confinement and/or the surroundings of the device.
- 40. (original) The device of claim 39, wherein said mixing mechanism comprises a heating device.
- 41. (original) The device of claim 39, wherein said mixing mechanism comprises a mechanical mixer and a power source for operating said mixer.
- 42. (original) The device of claim 39, wherein said mixing mechanism comprises a sound wave generator.
- 43. (original) The device of claim 1, further comprising a flow generating mechanism for actively generating a flow of gastrointestinal fluids through said predetermined confinement.
- 44. (original) The device of claim 43, wherein said flow generating device is a pump.
- 45. (original) The device of claim 1, wherein said confining mechanism comprises a housing.
- 46. (original) The device of claim 45, wherein said housing is composed of a bioresistant material.
- 47. (original) The device of claim 3, wherein said confining mechanism comprises linkers linking among molecules of said sink material, thereby forming a molecular mesh structure.
- 48. (original) The device of claim 45, wherein said housing is designed and constructed so as to prevent damage to said sink mechanism by constituents of said gastrointestinal tract.
- 49. (original) The device of claim 45, wherein said housing is designed and constructed so as to prevent damage to said gastrointestinal tract by the sink mechanism.

- 50. (original) The device of claim 1, further comprising a substance for maintaining a predetermined pH level within said predetermined confinement.
- 51. (original) The device of claim 45, wherein said housing is configured for expanding and/or contracting.
- 52. (original) The device of claim 1, made detectable by at least one detection method for detecting the device in said gastrointestinal tract.
- 53. (original) The device of claim 52, wherein said at least one detection method is non-invasive.
- 54. (original) The device of claim 52, wherein said at least one detection method is imaging.
- 55. (original) The device of claim 52, wherein said at least one detection method is selected from the group consisting of x-ray imaging, magnetic resonance imaging, ultrasound imaging, gamma-gamma imaging and automatic tracking.
- 56. (original) The device of claim 1, further comprising a protective cover made of a biodegradable material, said protective cover being design and constructed to degrade only when arriving to a predetermined location of said gastrointestinal tract.
- 57. (original) The device of claim 1, wherein said at least one constituent-of-interest is selected from the group consisting of a toxin, creatinine, uric acid, a hepatic toxic metabolite, alcohol, an alcohol metabolite, an electrolyte, a therapeutic or a medicinal agent, a detergent, a renal metabolite, a poisonous substance, a nutritional substance, a biochemical compound and a heavy metal.
- 58-108. (canceled)